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BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's Rules	)	ET Docket No. 95-183
Regarding the 37.0-38.6 GHz and	)	RM-8553
38.6-40.0 GHz Bands	)	
	)	
Implementation of Section 309(j) of the	)	
Communications Act - Competitive Bidding,	)	PP Docket No. 93-253
37.0-38.6 GHz and 38.6-40 GHz	)	

To: The Commission

COMMENTS OF INNOVA CORPORATION

Pursuant to Section 1.415 of the Commission's Rules,[1] INNOVA Corporation ("INNOVA") hereby comments on the above-captioned Notice of Proposed Rule Making and Order ("NPRM"). In the NPRM, the Commission proposes amending its rules to establish a channelization plan and licensing and technical rules for fixed point-to-point microwave service ("FS") operations in the 37.0-38.6 GHz band ("37 GHz band"). In the Comments below INNOVA essentially agrees with the Commission's proposals in this proceeding but questions the antenna standards spelled out in the amended Section 21.108(c) and Section 94.75(b).

I. GENERAL

INNOVA is a State of Washington corporation with its headquarters located in Seattle, Washington. It is a leading manufacturer of microwave systems used in wireless networks most

[1] 47 C.F.R. Section 1.415 (1996).

notably in the 37.0-40.0 GHz bands. Its products are sold in both the U.S. domestic markets and overseas.

Section III - Service Rules Should Permit Maximum Use of 37 and 39 GHz Bands

Referring to the Notice at para. 13, INNOVA strongly agrees that the public interest will be served by developing service rules that will permit maximum possible use of the 37 and 39 GHz bands for terrestrial operations, including point-to-point operations such as those providing broadband PCS and cellular infrastructure links. INNOVA also supports the harmonization of licensing and technical rules for the entire 37 - 40 GHz band in order to make the entire band more suitable for supporting broadband PCS and cellular services, noting the addition of the technical comments made below.

Fixed point-to-point services are essential in providing reliable service to the public in such areas as local exchange carriers, cellular telephones, public safety, utilities, pipelines, railroads, and state and local governments. Furthermore, emerging wireless telecommunications technologies, e.g., PCS, will rely on point-to-point facilities to support their operations.

INNOVA concurs with views expressed by the Telecommunications Industry Association (TIA) that the 39 GHz band alone will not be adequate to satisfy demands and that the 37 GHz band should be associated with the former, channelized in the same manner, and the applicable service rules for both bands harmonized. INNOVA likewise agrees that "expedited action" is necessary.[2]

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[2]See Notice at page 7, paragraphs 10 and 11.

Section IV - Equipments Can Be Made Available Promptly; Licensees Should Be Allowed To Subdivide Bands

Regarding transmit to receive spacings other than the current 700 MHZ, should it be determined that the use of 16 new paired 50 MHZ blocks using 800 MHZ transmit and receive spacing instead of 14 paired and 4 unpaired 50 MHZ best serves the public interest, equipment to support such a separation poses no technical challenges for the supplier base, would have no significant cost impacts compared to 700 MHZ spaced systems, and could be made available immediately upon FCC adoption of this channel scheme.[3]

INNOVA strongly agrees with proposal to allow licensees to subdivide their assigned channel bands as they wish. Numerous currently available digitally synthesized radio systems offer users complete channelization flexibility via software controls which would be unchanged if a 1.25 MHZ channelization were required. Such radios are typically among the most price competitive in various international markets where usage of these frequency bands has existed for years. INNOVA agrees that short propagation distances, and additionally, inherent licensee interest in effective and efficient use of assigned channels, eliminate the need for a mandatory subchannelization scheme.[4]

Section V - FCC Proposal to Decline to Specify Directional Standards is Supported

INNOVA recommends against requiring use of only category A antennas, and therefore agrees with the Commission's proposal to decline to specify directional antenna standards.[5]

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[3]See Notice at page 11, paragraph 19.

[4]See Notice at page 11, paragraph 20.

[5]See Notice at pages 54-56, Section K, paragraph 113-115.

Elimination of minimum antenna radiation pattern requirements for antennas used by 37 - 40 GHz band licensees within their assigned geographic areas and channel blocks will provide important benefits. It will allow the development of innovative antenna types and mounting systems which will reduce antenna costs, physical size, mounting requirements, and visual impact, while increasing the number of potential installation locations and facilitating the development of new applications within this band. Licensee control of geographically assigned spectrum serves to insure appropriate measures to avoid interference will be taken. In cases of adjacent frequency or adjoining area licensee interference which cannot be informally resolved, the cited optional FCC requirement for the use of a category A antenna could be invoked. Noting this, INNOVA agrees with TIA that the frequency tolerance be reduced to 0.001% for equipments operating in the 37 and 39 GHz bands.[6]

In connection with revision of licensing rules, INNOVA supports the operation at a minimum digital efficiency of 1bps/Hz for all those channel blocks which would be available for use for broadband PCS or cellular services.[7]

Section VI - Reference to Category A
Should Be Deleted From Proposed New §21.108(c) and §94.75(6)[8]

Noting the comment in Section V just above and discussion in the Notice at paragraph 115, INNOVA is puzzled by the footnotes in the new §21.108(c) and §94.75(b) which state "... However, antennas installed on or after that date (i.e., January 1, 1998) shall be of Category A."

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[6]See Notice at pages 54-top page 55, paragraph 113; bottom page 55-top page 56, paragraph 115.

[7]See Notice at pages 50-51, paragraphs 105-107.

[8]See Notice - Proposed Rules, pages 6 and 14.

INNOVA suggests the above quoted sentence be deleted or replaced with a substitute sentence stating: "No specific directional antenna standard is specified for antennas installed after _____" (insert the date rulemaking is adapted in this proceeding).

VII. CONCLUSIONS

In conclusion, INNOVA supports:

(a) Amending the Commission's Rules to open the 37-39 GHz bands to terrestrial fixed service users and harmonizing the Rules applicable to those bands.

(b) Rules should be amended to permit maximum possible use of the 37-39 GHz bands by the terrestrial fixed services.

(c) Subdivision of bands by licensees.

(d) The Commission's proposal not to specify directional antenna standards.

(e) Operation at a minimum digital efficiency of 16 ps/Hz for all systems used in the 37-39 GHz bands.

WHEREFORE the premises considered, the Commission is urged to proceed to rulemaking in the above-cited proceeding.

Respectfully submitted,

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